

CLAIMS

1. A base for wireless connection of terminals to a communications network, said base including transmit/receive means adapted to exchange information with a remote terminal also provided with transmit/receive means, characterized in that the transmit/receive means of the base include a transmitter including an extended infrared light source.
2. An optical base according to claim 1, characterized in that the transmitter of the base is adapted to transmit information to a remote terminal at a high bit rate.
3. A base according to either preceding claim, characterized in that it includes source position control means for obtaining optimum alignment of the source and the transmit/receive means of a terminal located in the coverage area of the base.
4. A base according to any one of claims 1 to 3, characterized in that the extended infrared source includes laser emitter means and transmission diffuser means for diffusing radiation emitted by the laser emitter means.
5. A base according to claim 4, characterized in that the transmission diffuser means are of the holographic type.
6. A base according to any one of claims 1 to 3, characterized in that the extended infrared source includes laser emitter means and reflector means for diffusing radiation emitted by the laser emitter means.
7. A base according to any preceding claim, characterized in that the transmit/receive means of the base include an omnidirectional receiver.

8. A base according to claim 7, characterized in that the omnidirectional receiver includes at least an omnidirectional concentrator.

5 9. A base according to claim 8, characterized in that the omnidirectional concentrator is hemispherical and includes an optical filter.

10 10. A base according to claim 8, characterized in that the omnidirectional concentrator has been subjected to an anti-reflection surface treatment.

15 11. A method of wireless communication between a base for connection to a communications network and a remote terminal, said base including transmit/receive means adapted to exchange information with said terminal, which is also provided with transmit/receive means, which method is characterized in that the transmit/receive means of the base transmit information to said terminal
20 by means of a transmitter including an extended infrared light source.

25 12. A method according to claim 11, characterized in that information is transmitted from the base to said terminal over an infrared link having a line of sight that is direct, non-direct, or hybrid.

30 13. A method according to claim 11 or claim 12, characterized in that the transmit/receive means of said terminal transmit information to the base over an infrared link having a line of sight that is direct or non-direct.

35 14. A method according to any one of claims 11 to 13, characterized in information is transmitted between said terminal and the base in burst mode.